



**SUBJECT: Hurricane Michael Mental Health Needs Summary**

Bay District Schools (BDS) is a medium-sized school district located in Northwest Florida in the heart of the Panhandle. Panama City is located in Bay County, about a two hour drive west of Tallahassee. The Florida Panhandle consists of mostly rural, poor communities interspersed with small cities and the occasional more affluent community along the coast. We have a significant number of active duty and retired military personnel who reside here. Tyndall Air Force Base and Naval Support Activity Panama City are both located in Bay County.

**Hurricane Michael Impacts Bay County:**

Hurricane Michael made landfall on October 10, 2018, between Mexico Beach and Tyndall Air Force Base, leaving behind massive destruction throughout Bay County and 17 other Panhandle counties. Bay County took a direct hit from devastating Hurricane Michael. The Category 5 hurricane was the third-most powerful storm to ever make landfall in the United States - stronger than Andrew and Katrina. The hurricane caused incredible damage, both physically and psychologically.

It is difficult to put into words the impact the storm has had on our area. The widespread devastation will have effects lasting generations. This part of Florida has never before experienced a storm of this magnitude. There has been massive damage to housing, major personal property loss to citizens, closure of or significant impact on many businesses, infrastructure wreckage in all jurisdictions and the crippling of many aspects of natural and cultural resources. Other consequences have occurred, such as huge economic losses, large reduction in the workforce, reduction in population leading to additional personnel layoffs, healthcare needs that cannot be met, and a dramatic increase in psychological issues from the trauma inflicted by this event (Source: Rebuild Bay County, Florida Executive Summary).

The following excerpts, taken from a report by the Bay County Long-Term Community Recovery Group, provide only a brief glimpse into the massive long-term impacts Hurricane Michael has had on Bay County:

- 68% of all residential homes in Bay County were significantly damaged or destroyed.
- 73% of multi-family apartments in the most populated areas of Bay County are damaged, forcing families to leave the area entirely or relocate to other portions of the county. Many families are still living in tents and condemned homes.
- 200 damaged housing units are being rebuilt and are projected for completion in 3-5 years (Source: Panama City Housing Authority).
- 33+ million cubic yards of debris was picked resulting in damages left by the storm with 16 million cubic yards of debris picked up in Bay County alone.
- 2 of the only available hospitals in the area were seriously damaged, resulting in the closure of critical trauma centers and greatly reduced medical care to residents and visitors. There has been significant loss in the availability of medical professionals due to the housing crisis.

- 11,000 military personnel and another 7,000 civilians staffed at Tyndall Air Force Base provided an annual economic impact of more than \$2 billion. This base suffered massive damage with the estimated cost to rebuild this critical strategic installation being \$4.7 billion.
- 3 million acres of timber in the region were destroyed, leaving a total of more than 72 million tons of fallen trees. This equates to damages to the timber industry totaling \$3 billion. This industry represents a significant portion of the regional economy.

Hurricane Michael has created an enormous economic challenge. In addition to the loss of businesses and workforce personnel, tax revenues for the county and all jurisdictions will be greatly affected in the coming months and years.

To this day, more than eight months after the storm made landfall, basic needs are still not being met for many residents - including shelter, food, water and security. Many families are living in tents or campers in their front yards. Others are residing in their heavily damaged structures, without roofs or intact walls. Bay County has suffered from the loss of five infants due to non-health related deaths since Michael. Some of these casualties can be directly attributed to the lack of appropriate space for safe sleeping or other arrangements for infants.

The housing crisis resulting from the storm has exacerbated the pain. Approximately 90% of homes and buildings in Panama City were damaged or destroyed (source: Mark McQueen, Panama City Mayor). Competition for living in the remaining structures has resulted in an affordable housing crisis. With housing so severely impacted, rents in Panama City have gone up 400% more than what they were prior to the storm. These factors have forced many families to move out of the area. Limited and unaffordable housing have made it difficult to bring in skilled workers and other professionals from outside the area to assist with our rebuilding, medical, and mental health needs. This lack of available personnel and resources are further exacerbating our challenges.

#### **Populations Affected:**

The devastation from Hurricane Michael has added to the already complex challenges within large parts of Bay County. In the world of news and social media, Bay County is often advertised as a popular tourist and vacation spot along the beautiful Gulf Coast. Pictures of restaurants, hotels, and high end shopping areas are typically shared from Panama City **Beach** and not Panama City. It is important to note that the majority of the beach area was fortunately spared from the storm.

Coastal communities tend to be more affluent in nature due to higher costs for property and lifestyle. However, in the case of Hurricane Michael, the eyewall directly impacted the east end of Bay County, where a significant number of poor, low socioeconomic communities with historically high rates of behavioral and mental health challenges (including substance use, child abuse and neglect, and high suicide rates) reside. Research from previous disasters indicates that these populations are considered "high risk" for developing long-term mental health

disorders after a devastating hurricane. Panama City proper and surrounding municipalities, including Lynn Haven, Parker, Callaway and Springfield, contained the highest percentage of economically disadvantaged residents. These already impoverished areas experienced the brunt of the catastrophic damage. Tyndall AFB was also hit directly. On-base housing was destroyed and evacuated families were only able to eventually return in an attempt to retrieve any salvageable belongings. Most active duty personnel and their families received orders to other bases as Tyndall begins to rebuild.

BDS serves families who live in these low socioeconomic, high poverty areas. According to a recent 2017-2018 state report, 57% of the total student population were economically disadvantaged (free/reduced lunch). Neighborhood schools, subsidized housing, and generational homes, all in the heart of low-income areas, experienced significant damage as a result of the storm. In addition, many of our students and families are now living in new and unfamiliar environments such as shared homes, tents, or RV's, many with little or none of their personal belongings. Prior to the storm, 748 students were identified as homeless. Following the storm, this number increased to more than 5,499.

### **Direct Impact on BDS**

BDS delivers a high quality education in a collaborative, safe, and respectful environment. Our commitment is to inspire students in the development of character with the acquisition and use of knowledge and skills as we prepare them for life and work in a diverse, global economy. Prior to the catastrophe of Hurricane Michael, the district included 32 public schools and 9 charter schools. Approximately 29,160 students were enrolled prior to the storm.

Devastation from the hurricane immediately resulted in the closing of schools for an extended period of time. Infrastructure was heavily damaged. Estimated capital expenditures to rebuild and repair facilities exceeds \$335 million. Our insurance will cover only \$100 million. We have applied for assistance and to date have only received \$23 million in FEMA reimbursement dollars.

Currently, 28 public non-charter schools, and 9 public charter schools are open within the district with a total student enrollment of 25,137. Since the storm, the district has had to close four schools and consolidate two more due to a combination of facilities destruction and decreased student enrollment. The decrease in student enrollment has resulted in a huge operational loss; \$8.8 million loss for the 2018-2019 school year and an estimated \$16 million loss for the 2019-2020 school year. Over 25% of our Title I student population has left the area due to limited housing. As a result, approximately 150 employees have been dismissed so far and more layoffs may occur next year. In addition, more than 228 employees have been forced to leave the area due to hurricane related issues. BDS is Bay County's largest employer. A lot of families depend upon us for employment, for the money to take care of their families, and for the funds to continue their recovery process. Employee layoffs deeply impact the community from both economic and psychological standpoints. Children have already suffered so much loss as a result of the storm. Losing teachers they love, and who love them, along with

administrators and support staff upon whom they count on is yet another devastating blow to our youngest citizens.

In addition, a district-wide spending freeze was instituted and departments have been asked to take drastic measures to cut budgets. This has greatly hampered our ability to bring in the necessary resources to support the educational and psychological needs of our students and staff in the storm's aftermath.

An additional hurdle in stabilizing the learning environment is increased teacher and staff absences that are necessary for adults to restore their personal spaces. These absences often result in substitute teachers who are not as familiar with the individual student trauma and new classroom dynamics. Following Hurricane Michael, the daily average of unfilled substitute vacancies is at 25% of needed classrooms. Our lack of substitutes result in students having to combine with other classrooms where they are not familiar with the teacher or the environment. The extra students and responsibilities are leading to additional demands and stress on our educators, which hinders their ability to execute quality instruction. The loss of critical substitute personnel from the storm has directly resulted in lack of substitute coverage. This challenge of coverage does not allow teachers and staff to be away from the campuses to participate in professional development and be equipped with the training and support they need in order to restore the learning environment.

Please keep in mind that all of this is occurring while almost **20% of our total current student population is considered homeless** due to the storm! You are reading this correctly - BDS has experienced an approximate 650% increase in homeless students as a direct result of the hurricane.

While the physical damage and resulting effects have been devastating, perhaps the hurricane's greatest impacts have been the psychological toll it has taken on our entire BDS family (see current state of mental health crisis for more information). ***We can repair a roof easily enough; however, it is not as easy to repair a shattered mind.***

#### **Importance of Attending to Mental Health Needs After A Disaster:**

Mental health services are a vital part of any disaster relief effort, yet are often overlooked. It is extremely important that the mental health needs of children and adults are properly addressed. Studies conducted after previous destructive hurricanes, such as Andrew and Katrina, show that many children experience stress reactions, which may persist for months and even years after a storm has passed. For example, seven months after Hurricane Andrew, approximately 40% of children who experienced the disaster reported moderate to very severe levels of posttraumatic stress (La Greca & Prinstein, 2002). If not properly addressed, these reactions can lead to significant long-term psychological disorders that can greatly affect the individuals, their families and the community around them for years to come. In some cases, this can even lead to suicide. For example, Monroe County saw a significant spike in suicides after Hurricane Irma struck the Florida Keys in 2017. In our own school system, we have already seen some of the

psychological effects of the hurricane on both our staff and students. Many students, for example, have exhibited behavioral, attendance and academic performance issues since the storm that had not existed prior.

We are extremely concerned about a potential spike in suicide and other mental health related challenges. Yet, despite all of the research and best practices citing how critical mental health services are after a disaster, our area has received very little support to address our mental health needs since the storm. In fact, BDS has **not received one single dollar for mental health support** as of June 6, 2019. **Not a single dollar - from Federal, State or private sources.** We do not have the resources to address the tremendous mental health needs of our students and staff. As a result, we are currently experiencing an unfortunate and extremely challenging mental health crisis in our schools and community.

#### **Current Mental Health Crisis In Bay County:**

The current mental health crisis in Bay County is like nothing we have experienced before. It impacts all parts of society, in every community. It has also had a great effect on our school system.

In March and April 2019, approximately six to seven months after Hurricane Michael, BDS conducted an assessment of students and staff regarding their hurricane exposure and psychosocial functioning. The surveys indicate significant levels of post-disaster depression, anxiety and emotional trauma amongst students and staff (see table below). It is important to note that approximately 38.3% of employees and 34% of students reported symptoms consistent with at least one psychological disorder. These results signify that **more than 1 in 3 of every staff and student** in BDS will need a higher level of service beyond what typical post-disaster crisis counseling programs can support.

BDS Assessment (March/April 2019)	Clinical Depression Symptoms	Clinical Anxiety Symptoms	Clinical PTSD Symptoms
Students	27.6%	20.6%	18.7%
Employees	33.2%	29.2%	15.6%

Real world situations have reflected these data points. For example, our schools continue to experience a high rate of students in crisis. At the end of the 2019 school year, there were a total of 125 students who have had the Baker Act invoked since Hurricane Michael. The Baker Act is the Florida Statute that allows involuntary examination and placement of an individual who is in need of crisis stabilization due to signs of mental illness or threats of harm to self or others. This is a last resort and is very rarely applied. However, this has almost become commonplace in our schools after the hurricane as our mental health needs have been

unaddressed. In fact, in March, our district was averaging almost two Baker Acts of students per day. To make things worse, the hurricane damaged our major behavioral health hospital, resulting in only one receiving facility for Baker Acts in our county. This receiving facility has the capacity to accept 16 individuals at a time, with only 4 of those 16 spots available for children. As a result, students have been transported to other facilities in other parts of the state - in some cases as far away as South Florida. This causes incredible, emotional, financial and logistical hardships on the students and their families.

As another example, the district has received more than 725 Community of Care referrals since the hurricane. A Community of Care referral is completed when school-based problem solving teams identify students in need of intensive, individualized counseling services. The school submits the referral to the district mental health team to refer out to our community agency partners. Unfortunately, since Hurricane Michael, our community agency partners have reported that they have lost approximately 40% of their behavioral health service capacity. This has occurred at a time when the demand for services has never been greater in our area. Simply put, there are not enough services to meet the community's mental health needs. Due to the decrease in service provider capacity since the storm, many students and families find themselves on outstanding waitlists for services. Currently, we have more than 350 of our Community of Care referral students on a waitlist for services or who their current service status is unknown.

Suicide is a critical concern, particularly given the high levels of depression seen in our students and staff assessment. In April, an elementary school principal reported that three fifth-grade girls had made a suicide pact, brought razor blades to school and began to cut their wrists during P.E. in front of all their classmates. This horrifying incident resulted in a high-needs crisis that was incredibly traumatic for everyone who witnessed the event and resulted in shockwaves that reverberated throughout our community. In May, another elementary school reported a kindergarten student who had made statements about wanting to die, going to heaven and having access to a weapon in his home. The student reported that he had heard similar statements and conversations from his parents in their home. Also in May, during a one week span, it was reported to BDS staff that three parents and relatives of BDS children committed suicide. These traumatic situations are merely a snapshot into the daily crisis taking place in our schools and community. The emotional trauma and stress of our students and staff are impacting the educational environment across each and every school campus.

Crisis behaviors such as aggression, defiance, and threats of harm to others or self have increased as the school year has progressed. This is due mostly to a lack of resources coming into our area for mental health. As we've entered the summer and the hurricane season, most Bay County residents have received little to no mental health support. We are quite concerned about how the unstructured summer days will affect our staff and students. Again, the school district has not received a single dollar for mental health support despite an intensive effort to obtain funding.

We are at a critical juncture in the recovery cycle for mental health. Research tells us that the 7-10 month mark is when mental health reactions, if not addressed, begin to become chronic. Chronic psychological disorders require a much more intensive level of services over a longer period of time. Couple all this with the fact that basic needs are still not being met for many families and we have the real potential of falling into a full blown humanitarian crisis should another adverse event occur.

All of our community providers and mental health partners are doing everything they can to support our students and staff. The fact is we do not currently have the capacity to address all the needs.

#### **Current State Of Service Provider Capacity within BDS**

The district's Student Services Department accounts for a variety of professionals who support student needs with regard to mental health, including six school psychologists, one attendance social worker, three social workers for homeless and foster care, six academic Multi-Tiered System of Supports (MTSS) Staff Training Specialists, five behavior MTSS Staff Training Specialists, and one English Language Learner (ELL) Resource Teacher. Work and time is split across all schools and the professionals try to serve as many students as possible. The Student Services Department conducts monthly meetings with school counselors and interventionists to discuss best practices and updates. However, this group is in need of specialized training and professional development as they remain committed to responding to our students' needs after the hurricane.

BDS Student Services is also responsible for the Mental Health Assistance Allocation Plan, per the Marjory Stoneman Douglas High School Public Safety Act SB 7026. This funding was initiated during the 2018-2019 school year. As a result, BDS established a small mental health team, as well as a Community of Care referral system in which the district partners with community providers. As students in need of supports that go beyond the school level are identified, a referral is then made to an outside agency. We were fortunate to have this team in place prior to the storm to assist with some of our students' mental health reactions post storm. However, the needs of our students have surpassed the team's abilities to respond in a timely manner. The BDS mental health team is currently down to only one licensed clinician, one mental health liaison who assists with case management efforts, and one district level administrator to coordinate the initiative.

The district also has an Employee Assistance Program (EAP) in place to support our adult staff. However, this program is limited in nature and needs to be expanded to meet the significant needs identified in the recent psychosocial assessment.

#### **Community Service Providers that Support BDS**

BDS contracts with a number of community-based service providers to offer behavioral health services in the schools. Prior to the storm, the district had an effective system in place to address student mental health needs thanks to a combination of supports from Student

Services and our contracted community partners. However, due to the increased need for psychological services following the storm, coupled with the loss of capacity from some of our contracted providers, the system has been overwhelmed.

For example, Florida Therapy (an active community agency within the district) provided counselors to the majority of our Title I schools. These schools had caseloads of approximately 20-30 students receiving services. After the storm, many of these students returned to school and found themselves without a counselor. We started the school year with counselors at 22 of our Title I schools and ended the year with only 13 schools with a remaining counselor. Another very involved community partner, Anchorage Children's Home, had four counselors in our schools before the storm. This partner has been down to only one counselor for the remainder of the school year. These are just examples from two community providers that have been impacted since the hurricane - and how their loss of capacity has impacted our ability to support our students.

As stated previously, our community service providers reported about a 40% reduction in regional capacity as a result of the storm. Much of this can be attributed to loss of facilities due to storm damage and a loss of qualified personnel who left the area following the storm. This reduction in capacity has hit our community particularly hard. A shortage of mental health supports in Bay County has been exacerbated following the storm resulting in a system even less equipped to handle the greater demand for services.

Due to the loss of service provider capacity and an increased demand for services, many children and families find themselves on outstanding waitlists for much needed services. As discussed previously, the Community of Care system established by BDS has been disrupted due to capacity concerns with the majority of our community providers. BDS has more than 630 students who require case management, proper referral, and one-on-one counseling. These students are not currently receiving any services due to the local needs exceeding available local and state resources. In addition, there were more than 47 students who were receiving counseling prior to the storm whose provider moved away so they are no longer receiving services.

Another concern is that some of the current providers need additional training to deal with the disaster related mental health challenges that have arisen since the hurricane. A recent assessment of community providers by our mental health consultants, 7-Dippity, indicated that professional development will be critical to enhancing their capacity to support the psychological needs of our students and staff.

One positive is that the community provider network within our region is very strong. The different organizations collaborate well. While BDS was already meeting monthly with community partners, this storm has increased communication and sharing of resources. We believe it is critical to maintain open, honest, and sustained communication with our community providers. Assisting our partners also assists our students and staff.

### **FEMA Actions and Shortfalls**

While no financial assistance has been provided, some mental health-related services have been offered by FEMA for our community and school district. FEMA's mental health response to the hurricane has consisted primarily of the implementation of the Crisis Counseling Assistance and Training Program (CCP) and the sponsoring of three professional development workshops for BDS staff.

There were three training workshops offered by FEMA for our school district, entitled Skills for Psychological Recovery. To put it bluntly, these trainings did not hit the mark. The workshops were delivered in a variety of formats with inconsistent messages. The topics merely touched the surface of the faculty and staff needs. In addition, the trainings were not culturally competent nor geared for the specific needs of our schools. Lastly, the trainings were delivered on Saturday mornings, and FEMA would not offer stipends for our staff to attend, therefore only 100 out of our 3,300 employees attended in total.

The Crisis Counseling Assistance and Training Program (CCP) funded by FEMA is called Project Hope locally. This is a Tier 1 level of support which provides some group counseling and basic psychoeducation to the general population. Project Hope began working in our schools in April. Four teams of counselors have been working with students in seven locations: one middle school, four elementary schools and two after school sites. Project Hope also conducts a weekly one-hour teacher/administrator support group at six sites, which reaches a small number of BDS staff. Due to the limited and specific parameters of Project Hope, people identified as needing more intensive psychological intervention are typically referred to community-based mental health providers. Unfortunately, because of the lack of community mental health services and the stigma in getting help or attending these groups in Bay County, this model has been only partially effective.

### **Proposed Short Term Solutions**

To be clear, Project Hope is a needed and helpful resource for some of our population. However, our assessments and real-world challenges indicate this program will not be enough to meet the needs of many of our students and staff. And while our Student Support Services staff and other community partners are doing all they can, it is simply not enough. We don't have the capacity internally or within the community to properly address the mental health crisis.

This is why the school district is specifically requesting funding to: (1) bring in additional mental health professionals, (2) bring in support for case management services, (3) implement a comprehensive professional development plan, and (4) bring in additional tools and resources to address significant gaps. Working with disaster experts and peers from other school districts affected by previous disasters, we have developed a feasible, comprehensive plan to address the mental health needs of all of our students and staff. Please see Addendum 1 for additional information.

**We are in the midst of a mental health crisis here in Bay County.** The data and real world challenges we are experiencing back this up. There is no room for argument. We have made repeated requests to FEMA, other governmental agencies, NGOs, and private foundations for funding. As of this date, BDS has still not received a single dollar for mental health since the hurricane. As we break for summer and look to the beginning of next school year, it is crucial that we have the resources in place to address suicide prevention and other significant mental health concerns that we know are coming based on research from other disasters.

### **Closing Summary**

In summary, we have a particularly high risk, under-resourced community where mental health needs are at a crisis level and are unable to be properly addressed. Data from assessments show a significant percentage of the population may be suffering from one or more significant psychological disorders. Additional data and real life events show that the situation continues to deteriorate. Current mental health capacity will not meet the need for services. Research tells us we are at a critical point in time where many mental health-related problems that could have been more easily addressed may become chronic and harder to address. We know that we have to match the cure with the need. This involves enhancing capacity by bringing in much needed mental health professionals, providing case management services, providing professional development and equipping providers and staff with the proper tools and resources to meet our needs.

### **Addendum 1 - Funding Request:**

BDS is seeking funding to: (1) hire additional mental health professionals, (2) hire support for case management services, (3) implement our comprehensive professional development plan, and (4) obtain additional mental health tools and resources. Our goal is to create “Mental Health Support Teams” consisting of one clinical psychologist, one clinical social worker, one school counselor and one paraprofessional in each school, supported by a Mental Health Coordinator per every three schools. Professional development would be implemented district-wide and for our community partners to enhance capacity and address critical areas of need, including topics such as self care, suicide prevention, trauma-informed classroom strategies and behavior management. Case managers will help the district address the current 630 Community of Care referrals in need of case management services. Additional resources, such as consultant services and psychoeducational tools will ensure long-term support for students and staff.

### **Proposed Budget (3 years):**

Spending Category	Description	Total Year 1	Total Year 2	Total Year 3
<b>Administrative Costs</b>				
Project Assistant	Duties to include: coordination of schedules, intake calls from schools, families and providers, process messages, manage leave, payroll, and contracts, make copies for training needs, etc.	\$45,000	\$45,000	\$45,000
Tools/Resources	Research-based tools and resources to address critical areas of need (e.g., suicide prevention, psychoeducational tools, etc.)	\$125,000	\$100,000	\$25,000
Professional Development	Funds would be used to conduct professional development in needed topics (funding would include travel and stipend for facilitators, facility rental, refreshments, materials, misc. training costs, etc.)	\$125,000	\$100,000	\$50,000
<b>Total Projected Administrative Costs</b>		<b>\$295,000</b>	<b>\$245,000</b>	<b>\$120,000</b>

Addendum 1

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Spending Category	Description	Total Year 1	Total Year 2	Total Year 3
<b>Operational Costs</b>				
Salaries and Benefits (see Table 1)	Salary and Incentive Costs for Personnel	\$11,079,100	\$11,079,100	\$7,053,000
Logistics, Equipment, Supplies (see Table 2)	Supplies for each school site (to include charters) plus a laptop/technology for each counselor/social worker.	\$280,830	\$10,000	\$10,000
Consultants, Contracted Services & Travel	Consultants and services related to mental and behavioral health services.	\$200,000	\$100,000	\$50,000
<b>Total Operational Cost</b>		<b>\$11,559,930</b>	<b>\$11,189,100</b>	<b>\$7,113,000</b>
<b>Total Administrative Cost</b>		<b>\$295,000</b>	<b>\$245,000</b>	<b>\$120,000</b>
<b>Total Per Year Cost</b>		<b>\$11,854,930</b>	<b>\$11,434,100</b>	<b>\$7,233,000</b>
<b>3 Year Project Total:</b>		<b>\$30,522,030</b>		

## **Addendum 2: Psychosocial Assessment Outcomes**

The following provides brief outcomes from the Psychosocial Assessment of BDS students and staff. Assessments were conducted in March and April, 2019. Approximately 10% of BDS students and 20% of BDS staff were surveyed across demographics.

### **Highlights from the BDS Employee Assessment:**

- Many employees reported symptoms consistent with clinical depression (33.2%), anxiety (29.2%), and post -traumatic stress disorder (15.6%). In fact, 38.3% of employees reported symptoms consistent ***with at least one disorder*** and 13.8% of employees reported symptoms consistent ***with all three disorders***.
- Nearly all employees reported damage in their neighborhood, and more than two-thirds reported changes at work or school resulting from the storm. Importantly, over half the employees also had their homes damaged badly or destroyed, and a little over one-third of participants reported that they had to move to a new place because of the storm. Half reported that their clothes/belongings were ruined, nearly one-third reported difficulty getting enough food or water in the immediate aftermath, and approximately one-fifth reported that a member of their family lost their job because of the storm. Overall, this represents a very high level of life disruption for BDS employees, as employees' homes and support systems were disrupted.
- Many employees continue to experience ongoing stressors related to the storm. For example, 70% reported that damage to their home has yet to be fixed. Given this high level of life disruption, it is not surprising that employees reported considerable distress and life-impairment due to the hurricane. In general, more than 70% report feeling upset about things since the hurricane. In addition, more than 80% report that feelings about the hurricane/events interfere with some aspect of daily living – especially by preventing them from enjoying and participating in things at work or in self-care activities.

### **Highlights from the BDS Student Assessment:**

- Many students reported symptoms consistent with clinical depression (27.6%), anxiety (20.6%), and post -traumatic stress disorder (18.7%). In fact, 34% of students reported symptoms consistent ***with at least one disorder*** and 9.1% reported symptoms consistent ***with all three disorders***.
- A substantial number of students reported experiencing potentially life-threatening traumatic events during the storm. Nearly 40% reported perceptions of threat to their own lives and over two-thirds thought that a loved one could be hurt or die. Such perceptions of life threat are especially important for the development of posttraumatic stress symptoms (PTSS). Approximately one-third of students experienced the windows or doors breaking in the place where they stayed, and 14.6% reported seeing someone hurt badly during the storm. Some students also reported a pet getting hurt or dying (8.0%), having to go outside during the storm due to damage (7.9%), getting hit by something falling or flying (6.0%), and being injured during the storm (5.1%).

- Substantial life disruption, especially with respect to housing, continues to exist for many students. Specifically, 57% reported that damage to their home has yet to be fixed, and 30% report living in a different home since the hurricane. In fact, over 40% of the students have moved at least once since the hurricane, and nearly 20% report moving two or more times. Approximately half of students continue to struggle with the way things look in their neighborhood, family members not getting along, and the way things look at home due to the storm. Prior research indicates that loss and disruption events after a hurricane contribute to persistent mental health concerns (e.g., La Greca et al., 1996; 2010). On average, students experienced 4 to 5 loss and disruption events each.

**Summary:**

Overall, the survey results revealed that BDS staff and students were greatly affected by Hurricane Michael, continue to experience substantial life-disruption, and report moderately high levels of psychological distress. Almost 40% of adults and more than a third of students completing the survey reported elevated levels of PTSD, anxiety, and/or depression. Of note, the rates of depression among employees and high school students were particularly elevated. A suicide awareness and prevention plan, coupled with professional development, should be put in place as soon as possible.

**Table 1 - Projected Personnel Costs by Spending Category**

Mental Health Team Personnel Projection and Cost (3 years)								
Job Title	Salary	Housing & Living Incentive	Per Year Salary & Incentive	Year One and Two		Year Three		Total Cost Over 3 Years
				#	Total Cost Year One and Two	#	Total Cost Year Three	
Project Assistant	\$45,000	\$0	\$45,000	1	\$90,000	1	\$45,000	\$135,000
Licensed Mental Health Counselor	\$93,600	\$20,400	\$114,000	12	\$2,736,000	12	\$1,368,000	\$4,104,000
Licensed Clinical Social Worker	\$93,600	\$20,400	\$114,000	12	\$2,736,000	12	\$1,368,000	\$4,104,000
School Social Workers	\$57,600	\$0	\$57,600	26	\$2,995,200	6	\$345,600	\$3,340,800
Case Managers	\$53,600	\$0	\$53,600	38	\$4,073,600	12	\$643,200	\$4,716,800
Mental Health Coordinators	\$79,200	\$20,400	\$99,600	12	\$2,390,400	12	\$1,195,200	\$3,585,600
Clinical Psychologist	\$108,000	\$20,400	\$128,400	12	\$3,081,600	12	\$1,540,800	\$4,622,400
School Psychologists	\$78,300	\$20,400	\$98,700	21	\$4,145,400	6	\$592,200	\$4,737,600
<b>Total</b>	<b>\$608,900</b>	<b>\$102,000</b>	<b>\$710,900</b>	<b>134</b>	<b>\$22,248,200</b>	<b>73</b>	<b>\$7,098,000</b>	<b>\$29,346,200</b>

**Table 2 - Projected Equipment / Materials Costs by Spending Category**

<b>Proposed Materials Budget Projection</b>				
<b>Description of Material</b>	<b>Quantity</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>
Laptop Computer	133	\$133,000		
Printer	75	\$37,500		
Paper / Office Supplies	varies by item	\$10,000	\$10,000	\$10,000
Locked Cabinet	133	\$33,250		
Office Phone	133	\$7,980		
Office Furniture	133	\$79,100		
<b>Total</b>		<b>\$280,830</b>	<b>\$10,000</b>	<b>\$10,000</b>